

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FI	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/768,274	01/25/2001		Werner Temme	24487	3642	
20529	7590	10/05/2006		EXAMINER		
NATH & A			NILAND, PATRICK DENNIS			
Alexandria,	VA 2231	14		ART UNIT	PAPER NUMBER	
				1714		

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			$\sim$
	Application No.	Applicant(s)	
Office Action Summer	09/768,274	TEMME ET AL.	
Office Action Summary	Examiner	Art Unit	
	Patrick D. Niland	1714	
The MAILING DATE of this communication ap Period for Reply	ppears on the cover sheet w	ith the correspondence add	ress
A SHORTENED STATUTORY PERIOD FOR REPI WHICHEVER IS LONGER, FROM THE MAILING [ - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the maili earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNI .136(a). In no event, however, may a d will apply and will expire SIX (6) MO te, cause the application to become A	CATION. reply be timely filed  NTHS from the mailing date of this com BANDONED (35 U.S.C. § 133).	
Status			
1)⊠ Responsive to communication(s) filed on 9/20	0/06		
	is action is non-final.		
3) Since this application is in condition for allows		ters prosecution as to the r	merite is
closed in accordance with the practice under	·	· · · · · · · · · · · · · · · · · · ·	Herita ia
	Ex parte Quayle, 1909 O.t	5. 11, 400 O.G. 210.	
Disposition of Claims			
4)⊠ Claim(s) <u>18-22 and 24-38</u> is/are pending in th	ne application.		
4a) Of the above claim(s) is/are withdra	awn from consideration.		
5) Claim(s) is/are allowed.			
6) Claim(s) <u>18-22 and 24-38</u> is/are rejected.		·	
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/	or election requirement.		
Application Papers			
9) The specification is objected to by the Examin	ner.		
10) The drawing(s) filed on is/are: a) ac		by the Examiner.	
Applicant may not request that any objection to the	· · · · · · · · · · · · · · · · · · ·	•	
Replacement drawing sheet(s) including the corre	ction is required if the drawing	g(s) is objected to. See 37 CFF	₹ 1.121(d).
11)☐ The oath or declaration is objected to by the E			
Priority under 35 U.S.C. § 119			
12) ☐ Acknowledgment is made of a claim for foreig a) ☐ All b) ☐ Some * c) ☐ None of:	n priority under 35 U.S.C.	§ 119(a)-(d) or (f).	
1. Certified copies of the priority documer	nts have been received.		
2. Certified copies of the priority documer		Application No	
3. Copies of the certified copies of the price	ority documents have beer	received in this National S	tage
application from the International Burea	au (PCT Rule 17.2(a)).		
* See the attached detailed Office action for a lis	t of the certified copies not	received.	
Attachment(s)			
Notice of References Cited (PTO-892)	4) $\prod$ Interview	Summary (PTO-413)	
2) Denotice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No	(s)/Mail Date	
Information Disclosure Statement(s) (PTO/SB/08)   Paper No(s)/Mail Date	5)	Informal Patent Application	
- aper rols/inian Date	o) 🗀 Other:	·	

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/20/06 has been entered.

The amendment of 9/20/06 has been entered. Claims 18-22 and 24-38 are pending.

- 2. Claims 18-22 and 24-38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- A. The instantly claimed "higher molecular weight polyol" references polymeric species. The recited molecular weights do not specify "average molecular weight" nor the type of average molecular weight. Information regarding this issue is well known and available in basic polymer texts. It is unclear what type of polymer molecular weight is intended by the instantly claimed molecular weight of the claimed higher molecular weight polyol component.
- B. It is unclear what the weight percentages of the instantly claimed components are based on, i.e. only the components of the step claimed plus ingredients encompassed by "comprising", all of the claimed components only, or all of the claimed components including the additional ingredients encompassed by "comprising", or some other basis.
- 3. Claims 18-22 and 24-38 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Art Unit: 1714

- A. The instantly claimed "higher molecular weight polyol" references polymeric species. The recited molecular weights do not specify "average molecular weight" nor the type of average molecular weight. Information regarding this issue is well known and available in basic polymer texts. The instant specification does not enable the skilled artisan to make the claimed polyol component having a polydispersity index of exactly one where it is polymeric.
- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 18-22 and 24-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat. No. 4408008 Markush.

Markusch discloses coating bowling alleys with compositions falling within the scope of those of the instant claims. All such coated bowling alleys fall within the scope of "sports floor" because they have the ability to have sports played on them, including bowling.

Markusch discloses the instantly claimed polyurethane dispersions at the abstract, from which the chain extension and inherent reaction with water of the NCO groups of the prepolymer a is expected to necessarily give the instantly claimed molecular weight and absence of free NCO groups; column 2, lines 56-68; column 3, lines 1-68, particularly 55-61; column 4, lines 1-68, particularly 60-68; column 5, lines 1-68, particularly 1-10; column 6, lines 1-68, particularly 63-68; column 7, lines 1-68, particularly 43-68; column 8, lines 1-68, particularly 1-15, which encompasses the instantly claimed NCO/OH ratios, 15-25 which encompasses the instantly claimed molecular weights considering that number average molecular weight is typically meant

Application/Control Number: 09/768,274

Art Unit: 1714

when the type is unspecified and the expected polydispersity would imply the instantly claimed molecular weights even if weight average molecular weight were intended, particularly after the subsequent chain extension with amines and water which will necessarily consume all of the NCO groups, and lines 59-68 which encompasses the solvent amounts of the instant claims 20-21; column 9, lines 1-68, particularly 1-5; column 10, lines 1-68; column 11, lines 1-68, particularly 10-12, 15-16, 21-26; column 12, lines 1-68, particularly 15-30 and 47-55 which falls within the scope of the instant claim 22; column 13, lines 1-68, particularly 7-9 which will be bonded according to the instant claim 24, which is read as requiring the polyurethane to have the stated ability but does not explicitly require the presence of the claimed elastic layers comprising rubber granulates or fibers as well as optionally additives, and its ability to adhere to substrates falls within the scope of the instant claims 25-26, lines 14-22 which falls within the scope of the rubber granulates of the instant claim 24 where the polymers are rubber and the instant claim 28, lines 40-68 which is also evidence of the polyurethanes' of the patentee ability to have the properties of the above discussed claims and the substrates such as wood, concrete, stone, bitumen, etc. have the ability to have sports played on them necessarily and inherently; column 14, lines 1-68, particularly 15, which reads on the instant claim 30, and 41-46; and the remainder of the document. The coating of the patentee will necessily fill/seal the pores in the porous substrates of the reference which falls within the scope of the instant claims 32 and 34. Example 9, column 20, lines 48-50 falls within the scope of the instant claim 19. The above coatings have the ability to be sprayed since they are liquids with adjustable viscosity, which falls within the scope of the instant claim 27 which does not specifically require spraying. The composition of the patentee bonds to the substrate and is therefore a "bonding agent". It will necessarily seep

Art Unit: 1714

between cracks in wood floors and bond these sections together by virtue of the intrinsic adhesive nature of polyurethanes used by the patentee, which falls within the scope of the instant claim 33 given that bowling alleys are made from prefabricated boards which are elastic based on the flexural modulus of wood used to make bowling alley boards. It is not seen that the composition of the patentee cannot be sprayed and such dispersions certainly flow. This ability to flow and form a film will necessarily give sealed pores in the substrate of the patentee. The coatings of the patentee are necessarily expected to meet the broad limitation of the instant claim 37.

Regarding the argument that the claimed "sports floor coverings" is a term of art, the applicant has not shown that one cannot play sports on the floor coverings of the above cited prior art. The argument that the instantly claimed coverings are different from those of the above reference is not persuasive because no differences between the instant claims and the above floor coverings are seen nor claimed. As stated previously, all such coated floors have the ability to have sports played on them. It is improper to read limitations into claims which are not there. The argued GIS is not in the instant claims nor has it been shown that the floor of the reference does not inherently possess these limitations. The applicant is invited to bring a section of flooring of the above reference and he will play a sport on it. The applicant has argued many properties which are not claimed. It is improper to read limitations into claims which are not there. It is axiomatic in the law that the claims are to be read within their broadest reasonable meaning. The instant specification does not redefine "sports floor" in the manner argued by the applicant. Thus, the examiner maintains his prior definition of sports floor as being any floor on

Art Unit: 1714

which sports can be played, which reads on any floor in the examiner's experience. There is no evidence to the contrary.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the amines of the instant claims 29, 31, 35 in the coating of the patentee because HALS are well known for use in polyurethanes to keep them from yellowing and are commercially available for this purpose and Markusch clearly desires to avoid light damage at column 2, line 47 and column 14, lines 26-31.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the coating thickness/amount of polyurethane per area of the instant claims 36-37 because this gives only predictable results to the ordinary skilled artisan and is within the ability of the ordinary skilled artisan to choose as evidenced by the patentee's silence to this parameter. It is not seen that the method of the patentee does not necessarily inherently fall within the parameters of claims 36-37.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the instantly claimed amounts of the instantly claimed ingredients because these amounts and types of ingredients are encompassed by the disclosure of the patentee, particularly the sections cited above. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to react these components in the order of the instant claims because the patentee at column 7, line 59 through column 8, line 15 states that their reactants may be reacted sequentially at column 8, lines 3-15 and the order of ingredients listed at column 7, lines 59-68 is that of the instant claims and that which the ordinary skilled artisan would first consider. It is noted that extra ingredients or reaction steps of the patentee are encompassed by

Application/Control Number: 09/768,274

Art Unit: 1714

"comprising" of the instant claims. There is no probative evidence supporting the applicant's representative's allegations of unexpected or superior results in a manner commensurate in scope with the instant claims and the cited prior art. The argued properties are affected materially by a variety of parameters encompassed by both the patentee and the instant claims such as but not limited to specific reactants used, e.g. polycarbonate polyol vs. polyether polyol vs. polyester polyol and even the specific species of these geni materially affect the properties as do molecular weights, and a huge number of other parameters such as reaction conditions, e.g. shear rate of stirring the emulsions before and after reaction, reaction temperatures and pressures, etc. It is noted that distribution of any given monomer throughout the polymer is a function of the specific nature of the other components used to make the polymer since these materials have different miscibilities with any given other reactant which materially affects the monomer distribution. These issues have not been addressed by argument nor probative evidence in a manner commensurate in scope with the cited prior art and the instant claims. For the above reasons, this rejection is maintained.

Page 7

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick D. Niland whose telephone number is 571-272-1121. The examiner can normally be reached on Monday to Thursday from 10 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

Application/Control Number: 09/768,274

Art Unit: 1714

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Primary Examiner
Art Unit 1714

Page 8